

**Discussion and conclusion.**— The management of the BU associate (rifampicin and streptomycin) and surgery consisting of resection of necrosis or granuloma *Mycobacterium ulcerans* with a skin graft. The children go without follow with heavy disabilities and poor function of the members requiring surgical treatment and rehabilitation.

#### References

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### Infrared thermograms: Orthopedic diagnostics support



M.A. Choukou<sup>a,\*</sup>, B. Jarlot<sup>a</sup>, A. Arfaoui<sup>a</sup>, S. Bourelle<sup>b</sup>, R. Taiar<sup>a</sup>

<sup>a</sup> *Groupe de recherche en science pour l'Ingénieur (GRESPI), université de Reims, Champagne Ardenne, campus du Moulin-de-la-Housse, BP 1039, 51687 Reims cedex 2, France*

<sup>b</sup> *American Memorial Hospital*

\*Corresponding author.

E-mail address: [amine\\_choukou@yahoo.fr](mailto:amine_choukou@yahoo.fr)

**Aim.**— To quantify the preparatory residual fault of strephenopodia by using Infrared Thermography (IRT) and plantar pressure platform. IRT showed local increases in tissues temperatures that are observed as hot points or non-homogeneity zones on the thermal cartography, which could be used as a new assessment tool for a variety of medical clinical problems studying [2].

**Materiels.**— An Infrared camera (Infratec VarioCAM-hr) [precision:  $\pm 2\%$ ] was used in order to measure the cutaneous temperatures. Besides, a Zebris platform (sampling frequency: 90 Hz, precision:  $\pm 5\%$ ) allowed plantar pressure repartitions (PP) in standing position as well as center of pressure (CoP) parameters.

**Patients.**— Three boys suffering from unilateral strephenopodia were assessed before surgery (tibial muscle transfert).

**Methods.**— Three static measurements and  $3 \times 30$ s of standing position maintaining [1] were firstly completed over the Zebris. Then, 10 minutes of physical activity were proposed in order to solicit the lower limb muscles. Thermal cartographies were completed for the anterior face (AF), posterior face (PF), and the internal face of the leg (IF).

**Results.**— StaticPP were 37% for the forefoot and 63% for the backfoot. Mean CoP was  $17 \pm 1$  mm right and  $13 \pm 1$  mm left which corresponds to  $15.3^\circ$  in the strephenopodia side. Only anterior-posterior CoP displacement in static condition and during 30s standing were significant ( $p < .01$ ). Significant temperature differences between healthy foot and strephenopodia were reported only post-effort ( $?T_{AF} = 0.82^\circ\text{C}$ ;  $?T_{PF} = 0.80^\circ\text{C}$ ;  $?T_{IF} = 0.96^\circ\text{C}$ ).

**Discussion.**— The significant correlation obtained between thermal zones, PPs and CoPs shows the possibility of quantification and follow-up of pathology-linked locomotor dysfunction. This study showed that IRT is not only a reliable tool but also a complementary analysis to posturography for pre-surgery orthopedic assessment and post-surgery strephenopodia follow-up.

#### References

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### Support in rehabilitation following Van Ness rotationplasty: About one case



M. Toussaint-Thorin<sup>a,\*</sup>, B. Constantinou<sup>a</sup>, M. Colpart<sup>a</sup>, L. Boulogne<sup>a</sup>, S. Lobreau<sup>a</sup>, I. Marcheras<sup>a</sup>, V. Bombart<sup>a</sup>, F. Porchet<sup>b</sup>, F.-C. Boyer<sup>a</sup>, S. Bourelle<sup>a</sup>

<sup>a</sup> *Unité de MPR pédiatrique, hôpital américain, CHU de Reims, 47, rue Cognacq-Jay, 51092 Reims cedex, France*

<sup>b</sup> *Bezannes*

\*Corresponding author.

E-mail address: [mathildetoussaint@hotmail.com](mailto:mathildetoussaint@hotmail.com)

**Keywords:** Van Ness rotationplasty; Ewing sarcoma; Prothesis

**Introduction.**— In large malignancy of the distal femur, limb salvage may not be feasible. Amputation is often the treatment of choice. A Van Ness rotationplasty is an alternative when the sciatic nerve is free of tumor, to improve functional outcome. After resection of the tumor on the thigh, the leg segment is kept turned through  $180^\circ$  and is fixed to the femoral segment remaining, so the ankle joint become the knee joint.

**Observation.**— We report the clinical story of F., 13 years old, who presents an Ewing's sarcoma of the lower extremity of the left femur without metastases. He was initially treated with EURO EWING 99 treatment protocol. In his case, a large malignancy of the distal femur, limb salvage may not be feasible. Multidisciplinary team proposed to patient and his family a Van Ness rotationalsty. The rehabilitation began at day 7 by pain control, maintenance of range of motion of the neo-knee and the hip, maintenance of global strength. In the same time we have made a sub-iscial discharge orthosis with knee lock and energy-storing foot, to ensure rapid recovery of walking. Difficulties in accepting this new status and oncological treatment interfered with the rehabilitation treatment. Recovery of ambulation with one forearm crutch took place within 45 days. The definitive prosthetic training started at 4 months.

**Discussion.**— The Van Ness rotationplasty is a therapeutic option infrequent in France and in the Latin countries. The challenge for this patient was to show him quickly shown the interest of this functional therapeutic choice. That's why the rapid recovery of walking, permitted by the provisional orthosis, was primordial. Evaluation of quality of life made by Veenstra et al. [1] showed a patients' physical functioning poorer than that of healthy peers but better in comparison to chronically ill patients.

#### Reference

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### Quality of life of adolescents with brace-treated idiopathic scoliosis



W. Kessomtini, N. Gader<sup>\*</sup>, H. Ben Brahim

*Unité MPR, CHU Tahar Sfar, 5111 Mahdia, Tunisia*

\*Corresponding author.

E-mail address: [nadra.gd@gmail.com](mailto:nadra.gd@gmail.com)

**Keywords:** Idiopathic scoliosis; Chêneau brace; Quality of life

**Introduction.**— Brace of idiopathic scoliosis can have a psychological and physical negative impact specially with adolescents. The main objective is to determine the influence of treatment by Chêneau brace on the quality of life (QoL) of adolescents with idiopathic scoliosis.

**Materials and methods.**— This is a cross-sectional study performed on 36 scoliotics divided into two groups. The first one included 18 brace-treated adolescents, the second 18 patients just rehabilitated. We evaluated their QoL by using “the Quality of Life Profile for Spine Deformities” scale (QLPSD) of Climent, SRS-22 scale and visual analogue scales (VAS) ranging from 0 to 100 mm.

In a second step we studied the correlation between QoL and correction angle, duration of brace wearing, age, Risser index and sex.

**Results.**— It's about 16 boys and 20 girls, the average age is 14 (10 to 18).

The QoL of patients without brace is significantly better than that of brace-treated patients for the overall score using the three scales. We had scores of 42, 83 and 35 for QLPSD, SR-22 and VAS against 61,78 and 55 for brace-treated. Psychosocial functioning, sleep disturbances and back flexibility were most affected in the brace-treated group.

We objectified a correlation between QoL and correction angle, duration of brace wearing per day but no correlation has been found between age and Risser index. However, gender seems to have an influence on psychosocial functioning and body image.

**Discussion and conclusion.**— Even though the brace does not influence back pain in idiopathic scoliosis at teenage, it's obvious that wearing the Chêneau